In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

Application.

Listing of Claims:

1. (Previously presented) In a data storage environment having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone, which has a data content that is a copy of the data content of the source being stored on the data storage system, a method, operable on a computer system, for protecting the clone's data content during a restoration of the source, the method comprising the steps of:

restoring the source by copying data content from the clone to overwrite the data content of the source while allowing host reads and writes to the source during the restoring step, said copying being determined by a clone delta map, used to track extents of the clone that are different between the clone and the source, and a protected restore map, used to track extents of the source that are modified during the restoring step, when an indication is set in the clone delta map and not set in the protected restore map;

preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step;

recording information that indicates the source affected by a host write in the protected restore map; and

setting the protected restore map as the delta clone map after the restoring step is completed.

2.   (Original) The method of claim 1, wherein the source and the clone are each represented by respective first and second logical units.

3.   (Cancelled)

4.   (Cancelled)

5.   (Cancelled)

6.   (Previously presented) The method of claim 1, wherein the clone delta map is used to copy only extents that are different between the clone and its source during the restoring step.

7.   (Previously presented) The method of claim 6, wherein the protected restore map is coordinated with the clone delta map for efficient processing of requests to write data to the source.

8.   (Previously presented) A system for protecting data content during restoration of data from a second volume of data to a first volume of data, the system comprising:

    a data storage system having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone and which has data content that is a copy of the data content of the source being stored on the data storage system or on another data storage system;

computer-executable program logic, configured from a computer-readable medium, configured for causing a computer to execute the steps of:

restoring the source by copying data content from the clone to overwrite the data content of the source while allowing host reads and writes to the source during the restoring step, said copying being determined by a clone delta map, used to track extents of the clone that are different between the clone and the source, and a protected restore map, used to track extents of the source that are modified during the restoring step, when an indication is set in the clone delta map and not set in the protected restore map; and

preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step;

recording information that indicates the source affected by a host write in the protected restore map; and

setting the protected restore map as the delta clone map after the restoring step is completed.

9.   (Original) The system of claim 8, wherein the source and the clone are each represented by respective first and second logical units.

10.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

13.   (Previously presented) The system of claim 8, wherein the clone delta map is used to copy only extents that are different between the clone and its source during the restoring step.

14.   (Original) The system of claim 13, wherein the protected restore map is coordinated with the clone delta map for efficient processing of requests to write data to the source.

15.   (Previously presented) A program product for use in a data storage environment and being for protecting data content during restoration of data from a second volume of data to a first volume of data, wherein the data storage environment includes:

    a data storage system having a first volume of data denominated as the source being stored on a data storage system, and a second volume of data denominated as the clone, which has data content that is a copy of the data content of the source being stored on the data storage system; and

    the program product includes computer-executable logic, provided from a computer-readable medium, which is configured a computer to execute the steps of:

    restoring the source by copying data content from the clone to overwrite the data content of the source while allowing host reads and writes to the Source during the restoring step, said copying being determined by a clone delta map, used to track extents of the clone that are different between the clone and the source, and a protected restore map, used to track extents of the source that are modified during the restoring step, when an indication is set in the clone delta map and not set in the protected restore map;

preserving the data content of the clone by not allowing it to be overwritten by host writes during the restoring step;

recording information that indicates the source affected by a host write in the protected restoring map; and

setting the protected restore map as the delta clone map after the restoring step is completed.

16. (Original) The program product of claim 15, wherein the source and the clone are each represented by respective first and second logical units.

17.   (Cancelled)

18.   (Cancelled)

19.   (Cancelled)

20.   (Previously presented) The program product of claim 15, wherein the clone delta map is used to copy only extents that are different between the clone and its source during the restoring step.

21.   (Original) The program product of claim 20, wherein the protected restore map is coordinated with the clone delta map for efficient processing of requests to write data to the source.